

Work Order ID 138354

138354

Page 1

Tuesday, October 27, 2015 11:27:01 AM

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 10/19/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 10/26/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: MLS Date: OCT 29 2015 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	B								MLS 15-11-09
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								
									DAS 27 9-89 DEC 23 2015
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									NOV 06 2015 DAS 6 9-89 DAS 28 9-89
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									DAS 27 9-89 DEC 23 2015

DEC 23 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY																																																											
☐ Environment	☐ Design	☐ Doc/Data	☐ Equip/Tooling	☐ Handling/Pre	☐ Material	☐ Internal Transport	☐ Tribal Knowledge	☐ LOA	☐ Substation	☐ Past Expiry Date	☐ Misidentified	☐ No Re-verification	☐ Operator	☐ Offset/Setup	☐ Supplier	☐ Training	☐ Use for Testing	☐ Poor Information	☐ Rushing	☐ Product Improvement	☐ Process Improvement	☐ Manufacturing Process	☐ Past Due	☐ Pressure/Forced	☐ Bending	☐ Centre Not Concentric	☐ Cracks	☐ Crimp/Kink/Ripple/Wave	☐ Cuffs	☐ Crushing	☐ Heat Treat	☐ Wave/Twist in Tube	☐ Marks/Chatter	☐ Temperature/Cure	☐ Set-up	☐ BOM/Route	☐ Broken/Damage/Defect	☐ Inspection Incomplete/Unqualified	☐ Contamination	☐ Countersink	☐ Cut Too Short	☐ Instructions Incomplete/Unclear	☐ Drill Holes	☐ Power Loss/Surge	☐ Folio/Program	☐ Grain	☐ Weld	☐ Wrong Stock Pulled	☐ Out of Sequence	☐ Off-set	☐ Mislabeled	☐ Fit/Function	☐ Misaligned/off center	☐ Positioned Wrong	☐ Outside Dimensions	☐ Over/Under tolerance	☐ Part Incorrect	☐ Part Lost/Missing	☐ Part Moved	☐ Drawing	☐ Finish	☐ Misread	☐ Turning Sequence
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001								
	Location: <u>sold</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

SHS
15/12/13

MCS DEC 23 2015

SHS 20151223

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																																																		
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Picklist Print

Tuesday, October 27, 2015 11:27:00 AM

Page 1

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM

IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3301 *646 3301* Upper Cutter Assy		Manufactured	No				Each	6.0000		1			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			DAS 28 9-89
				cck018				6					
				135452				1					
				136156				5					
646.3001 *646 3001* Lower Cutter Assy		Manufactured	No				Each	3.0000					DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			DAS 28 9-89
				cck018				3					
				136276				3					
646.2910 *646 2910* Deflector		Manufactured	No				Each	0.0000		1			DAS 6 9-89
646.3810 *646 3810* Bracket		Manufactured	No				Each	18.0000		2			DAS 28 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			DAS 28 9-89
				CCK106				18					
				136186				15					
				136560				3					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
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Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3510 Manufactured No

Each 2.0000

1

646 3510

Strut

**

136114

DAS
6
9-89

DAS
6
9-89

Location

Loc Qty

Loc Code

cck104

2

127077

2

DAS
28
9-89

646.3511 Manufactured No

Each 9.0000

1

646 3511

Strut

**

Location

Loc Qty

Loc Code

cck104

9

136169

9

DAS
6
9-89

DAS
28
9-89

647.0112 Manufactured No

Each 123.0000

2

647 0112

Strut Bracket

**

Location

Loc Qty

Loc Code

CCK032a

114

123318

22

M130388

92

CCK107

1

122245

1

CCK109

8

122871

8

123318

0

DAS
6
9-89

DAS
28
9-89

647.7703 Manufactured No

Each 8.0000

2

647 7703

Strut Assembly

**

Location

Loc Qty

Loc Code

CCK114

8

136140

8

DAS
28
9-89

9-89

DAS
27
9-89

NOV 06 2015

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Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

Each

1,509.000

138

NAS1149F0332P

13287

DAS
6
9-89

DAS
28
9-89

Washer

Location

Loc Qty

Loc Code

GA	162	
122063	162	
ST260a	636	
m128401	6	
m131026	80	
m131697	50	
m133284	500	
st268	117	
123900	7	
m130388	86	
m133077	24	
ST288	594	
m133134	594	

DAS
27
9-89

MS21042L3

Purchased

No

Each

564.0000

61

MS21042L3

133198

Nut

Location

Loc Qty

Loc Code

FP001	334	
M130922	334	
GA	136	
M131317	136	
ST305	94	
116549	12	
126333	49	
M128754	2	
M132123	17	
M132382	2	
M132883	8	
M133134	4	

DAS
27
9-89

DAS
6
9-89
NOV 06 2015
DAS
28
9-89

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				OTHER :																																																																					

Picklist Print

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Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3110 Manufactured No

Each 0.0000

646 3110

Channel

646.3710 Manufactured No

Each 19.0000

646 3710

Doubler

Location

Loc Qty

Loc Code

CCK002

19

127550

19

646.3210 Manufactured No

Each 14.0000

646 3210

Support

Location

Loc Qty

Loc Code

cck020

14

135549

5

136217

9

646.3713 Manufactured No

Each 11.0000

646 3713

Gusset

Location

Loc Qty

Loc Code

cck105

11

120631

11

MS24694-S51 Purchased No

Each 153.0000

MS24694-S51

Screw

Location

Loc Qty

Loc Code

ST289

153

m130928

153

NOV 06 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				OTHER : ☐			

Picklist Print

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Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-13A Purchased No

Each 54.0000 1

DAS 6 28
9-89 9-89

AN3-13A

Bolt

**

Location Loc Qty Loc Code

CA 3

m129682 3

GA 20

m127070 20

ST349 31

m131305 31

DAS 27
9-89

AN3-4A Purchased No

Each 159.0000 10

AN3-4A

Bolt

**

Location Loc Qty Loc Code

ST338a 100

m133234 100

ST350 59

m129682 50

m132317 5

m133064 4

DAS 27
9-89

CR3213-5-3 Purchased No

Each 132.0000 14

CR3213-5-3

Cherry Rivet

**

Location Loc Qty Loc Code

ST319 132

m127831 16

m130388 16

m132763 100

DAS 27
9-89

DAS 6 28
9-89 9-89
NOV 06 2015

DAS 28
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-5.5

Purchased

No

Each

159.0000

8

DAS

6

DAS

28

9-89

MS20470AD5-5 5

Rivet

**

Location

Loc Qty

Loc Code

ST310

159

123425

159

Each

30.0000

1

DAS

6

DAS

28

9-89

646.3711

Manufactured

No

646 3711

Clip

**

Location

Loc Qty

Loc Code

cck105

30

120626

30

Each

20.0000

1

DAS

6

DAS

28

9-89

646.3712

Manufactured

No

646 3712

Clip

**

Location

Loc Qty

Loc Code

cck105

20

101119

1

120630

19

Each

16.0000

1

DAS

6

DAS

28

9-89

646.3811

Manufactured

No

646 3811

Radius Block

**

Location

Loc Qty

Loc Code

CCK106

16

110717

1

122938

15

NOV 06 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

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Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-6A Purchased No

Each 114.0000 2

AN3-6A

Bolt

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST338a

100

M131305

100

ST349

14

M133064

14

BAS

27

9-89

MS24694-S55

Purchased No

Each 80.0000

MS24694-S55

Screw

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

ST289

80

m132803

80

BAS

27

9-89

646.3610

Manufactured No

Each 9.0000

646 3610

Filler

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

cck104

9

135625

3

136278

6

BAS

27

9-89

646.3714

Manufactured No

Each 12.0000

646 3714

Gusset

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

cck105

12

120632

12

BAS

27

9-89

NOV 06 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-6

Purchased

No

Each

1,040.000

8

DAS

6

DAS

28

9-89

MS20470AD5-6

RIVET

Location

Loc Qty

Loc Code

CCK004

890

124089

890

ST309

150

105433

150

DAS
27
9-89

646.3812

Manufactured

No

Each

14.0000

2

646.3812

Gusset Bracket

Location

Loc Qty

Loc Code

CCK106

14

136113

14

DAS
27
9-89

AN3-3A

Purchased

No

Each

200.0000

4

DAS

6

DAS

28

9-89

AN3-3A

Bolt

Location

Loc Qty

Loc Code

ST338a

200

m131624

200

DAS

6

DAS

28

9-89

DAS

27

9-89

646.3813

Manufactured

No

Each

10.0000

1

646.3813

Strut Bracket

Location

Loc Qty

Loc Code

CCK106

7

127453

2

132541

5

CCK23a

3

130946

3

DAS

6

9-89

NOV 06 2015

DAS

27

9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Picklist Print

Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-7

Purchased

No

Each

536.0000

3

MS20470AD5-7

DAS

DAS

6

28

9-89

9-89

Rivet

BAS
27
9-89

Location

Loc Qty

Loc Code

ST309

536

123425

536

3

MS21047-3

Purchased

No

Each

151.0000

18

MS21047-3

DAS

28

9-89

Nut Plate

Location

Loc Qty

Loc Code

CCK007

50

m133031

50

ST303

101

m130388

8

m133134

43

m133234

50

18

DAS

6

9-89

CCR264SS3-02

Purchased

No

Each

350.0000

36

CCR264SS3-02

DAS

28

9-89

Rivet, Cherry

BAS
27
9-89

Location

Loc Qty

Loc Code

ST321

350

M132317

4

M133134

146

M133316

200

36

DAS

6

9-89

NOV 06 2015

BAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				OTHER : ☐			

Picklist Print

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Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN3-5A Purchased No

Each 241.0000

AN3-5A

Bolt

**

2
133483

DAS 6 28
9-89 9-89

Location	Loc Qty	Loc Code
CA	128	
m129682	128	
FP001	22	
m133234	22	
GA	91	
m131420	91	

BAS
27
9-09

646.3715 Manufactured No

Each 13.0000

646 3715

Strut Doubler

**

2

Location	Loc Qty	Loc Code
cck105	13	
135537	6	
136215	7	

BAS
27
9-09

MS27039-1-12 Purchased No

Each 78.0000

MS27039-1-12

Screw

**

6

DAS 6 28
9-89 9-89

Location	Loc Qty	Loc Code
ST285	78	
m133031	78	

BAS
27
9-09

646.3716 Manufactured No

Each 16.0000

646 3716

Gauge Bracket

**

1

DAS 6 28
9-89 9-89

Location	Loc Qty	Loc Code
cck105	16	
133105	2	
136122	6	
136410	8	

BAS
27
9-09

DAS 6 28
9-89 9-89

NOV 06 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, October 27, 2015 11:27:00 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS20426AD5-7

Purchased

No

Each

78.0000

2

DAS

6

9-89

DAS

28

9-89

MS20426AD5-7

RIVET

**

Location

Loc Qty

Loc Code

ST312

78

101340

8

M132767

70

Each

116.0000

2

**

DAS

6

9-89

DAS

28

9-89

MS24694-S54

Purchased

No

MS24694-S54

SCREW

Location

Loc Qty

Loc Code

ST289

116

m130388

6

m133031

10

m133134

100

Each

412.0000

4

**

DAS

6

9-89

DAS

28

9-89

MS27039-1-21

Purchased

No

MS27039-1-21

Screw

Location

Loc Qty

Loc Code

cck007a

395

m127904

395

ST284

17

m126319

17

Each

206.0000

2

**

DAS

6

9-89

NOV 06 2015

DAS

28

9-89

MS27039-1-20

Purchased

No

MS27039-1-20

Screw

Location

Loc Qty

Loc Code

ST284

206

124326

206

DAS

27

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Picklist Print

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Tuesday, October 27, 2015 11:27:01 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-19

Purchased

No

Each

223.0000

22

MS27039-1-19

Screw

**

DAS
6
9-89

Location

Loc Qty

Loc Code

cck007a

200

28
9-89

m133134

200

22

GA

20

m124326

20

ST285

3

m127904

3

DAS
27
9-89

646.3717

Manufactured

No

Each

11.0000

1

646 3717

Doubler

**

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

11

DAS
28
9-89

120633

11

1

646.3718

Manufactured

No

Each

6.0000

2

646 3718

Custom Washer

**

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

6

DAS
28
9-89

135559

6

2

646.3719

Manufactured

No

Each

17.0000

2

646 3719

Doubler

**

DAS
6
9-89

Location

Loc Qty

Loc Code

cck105

17

DAS
28
9-89

120634

17

2

DAS
27
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

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Tuesday, October 27, 2015 11:27:01 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-10

Purchased

No

Each

301.0000

2

MS27039-1-10

SCREW

DAS
27
9-89

Location

Loc Qty

Loc Code

DAS

CA

41

6

m128635

41

9-89

cck007a

200

m132677

200

GA

50

DAS

28

9-89

m129541

50

ST285

10

m123522

2

m132640

8

AN3-11A

Purchased

No

Each

142.0000

10

AN3-11A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

DAS

6

9-89

ST338a

50

m133363

50

ST349

92

m132823

8

m133234

84

DAS

28

9-89

600.0990

Purchased

No

Each

37.0000

1

600 0990

MAGNABOND 6398 PART A

DAS
27
9-89
2016-7

Location

Loc Qty

Loc Code

NOV 06 2015

DAS

6

9-89

PKG

37

M129818

22

7/16/2015

M131589

15

2/11/2016

DAS

28

9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, October 27, 2015 11:27:01 AM

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

600.0991 Purchased No

Each 37.0000 1

600 0991

DAS

6

9-89

MAGNOBOND 6398 PART B

Location

Loc Qty

Loc Code

PKG

37

DAS

28

9-89

M129818

21

7/16/2015

m131589

16

2/11/2016

600.1012 Purchased No

Each 13.0000 1

600 1012

DAS

6

9-89

Sealant PR1425B2 (#654 sem)

Location

Loc Qty

Loc Code

cck017

11

m132805

3

m133380

8

6/1/2016

cck018

2

m129749

1

m131364

1

10/30/2015

600.0129 Purchased No

f 565.0000 8

600 0129

DAS

6

9-89

VHB TAPE 75935A651

Location

Loc Qty

Loc Code

CCK095

565

m127920

325

m131311

240

600.1013 Purchased No

Each 890.0000 5

600 1013

DAS

6

9-89

021200-3M TAPE PRIMER 94 PRIMER 24216

Location

Loc Qty

Loc Code

CCK095

890

m131145

890

6/15/2016

Tuesday, October 27, 2015 11:27:01 AM

Shop Packet Print

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3910 Manufactured No

Each 16.0000 4

646 3910

Shim

BAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

16

122951

16

Each 71.0000

**

DAS

6

9-89

DAS

28

9-89

646.3911 Manufactured No

646 3911

Shim

BAS
27
9-89

Location

Loc Qty

Loc Code

cck023

50

126059

50

cck104

18

126229

18

CCK106

3

123075

3

Each 49.0000

**

DAS

6

9-89

DAS

28

9-89

646.3912 Manufactured No

646 3912

Shim

BAS
27
9-89

Location

Loc Qty

Loc Code

cck023a

10

124501

10

cck104

39

103082

1

123143

38

**

DAS

6

9-89

DAS

28

9-89

NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

Picklist Print

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Page 16

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

646.3913 Manufactured No

Each 111.0000 1

646 3913

Shim

Location	Loc Qty	Loc Code
cck023a	25	
124108	25	
cck023aq	82	
126060	82	
cck104	2	
100136	2	
126060	0	
CCK106	2	
126231	2	

BAS
27
9-89

DAS
6
9-89
DAS
28
9-89

AN3-12A Purchased No

Each 135.0000 2

AN3-12A

Bolt

Location	Loc Qty	Loc Code
GA	18	
m129682	18	
ST338a	100	
m133234	100	
ST349	17	
m133064	17	

BAS
27
9-89

DAS
6
9-89
DAS
28
9-89

MS27039-1-16 Purchased No

Each 138.0000 2

MS27039-1-16

Screw

Location	Loc Qty	Loc Code
ST285	138	
m130388	4	
m131317	34	
m132344	100	

BAS
27
9-89

DAS
6
9-89
DAS
28
9-89

NOV 0 6 2015

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Shop Packet Print

Page 16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

Picklist Print

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Page 17

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

650.9201

Manufactured No

Each 9.0000

2

650 9201

Eyelet Bracket Assembly

**

BAS

27

9-89

Location

cck127

Loc Qty

9

Loc Code

136204

9

Each

18.0000

2

AN44-5A

Purchased

No

AN44-5A

Eyebolt

**

Location

ST339

Loc Qty

18

Loc Code

m126193

10

m133134

8

Each

18.0000

2

AN665-34R

Purchased

No

AN665-34R

Clevis

**

Location

ST330

Loc Qty

18

Loc Code

M130388

4

M133134

14

Each

56.0000

2

AN4C7A

Purchased

No

AN4C7A

BOLT

**

Location

ST340

Loc Qty

20

Loc Code

m133363

20

ST345

36

m127363

36

BAS

27

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 18

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

Each

800.0000

4

NAS1149F0432P

WASHER

DAS
27
9-89

Location

Loc Qty

Loc Code

ST260a

500

M132551

500

st268

300

M128995

63

M130388

8

M132677

125

M133234

104

Each

2,608.000

133363

DAS
28
9-89

MS21042L4

Purchased

No

MS21042L4

Locknut

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK004

2000

m133363

2000

FP001

2

m124231

2

GA

67

m127813

67

ST260a

138

m130799

56

m131803

6

m132262

76

ST305

401

m128300

8

m130388

7

m130922

97

m131618

12

m132123

56

m132382

121

m133316

100

NOV 06 2015

DAS
28
9-89

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Shop Packet Print

Page 18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

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Page 19

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

AN316C4R Purchased No

Each 53.0000 2

AN316C4R

NUT

DAS
6
28
9-89

BAS
27
9-89

Location

Loc Qty

Loc Code

ST331

53

m127618

3

m133234

50

2

MS21042-3 MS21042L3 Purchased No

Each 247.0000 2

MS21042-3

Nut / use MS21042L3

DAS
6
28
9-89

Location

Loc Qty

Loc Code

ST305

247

M128770

10

M129541

15

M129682

199

M130388

23

2

MS27039-08-13 Purchased No

Each 370.0000 2

MS27039-08-13

Screw

DAS
6
28
9-89

Location

Loc Qty

Loc Code

cck007a

346

124326

346

ST281

24

4067

20

M130388

4

2

BAS
27
9-89

NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																																																																											
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Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing																																																																																																																																					
Material ☐	☐	Use for Testing ☐	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved																																																																																																																																					
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing																																																																																																																																					
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish																																																																																																																																					
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread																																																																																																																																					
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence																																																																																																																																					
Past Expiry Date ☐	☐	Manufacturing Process ☐																																																																																																																																													
Misidentified ☐	☐	Past Due ☐	OTHER :																																																																																																																																												

Picklist Print

Tuesday, October 27, 2015 11:27:01 AM

Page 20

Work Order ID: 138354

138354

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 10/19/2015

Required Date: 10/26/2015

Start Qty: 1.00

Required Qty: 1.00

MS21042-08

MS21042L08

Purchased

No

Each

33.0000

2

MS21042-08

USE MS21042L08

128401

DAS

6

9-89

DAS

28

9-89

DAS

27

9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

Each

2,160.000

4

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

DAS

6

9-89

Location

Loc Qty

Loc Code

GA

346

125268

346

ST260a

500

M133316

500

ST267

393

125268

100

M133284

293

st268

921

M130388

921

DAS

27

9-89

NOV 06 2015

DAS

28

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐		No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐		Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐		Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐		Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐		Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐		Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐		Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐		Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐		Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐		Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐		Manufacturing Process	☐	OTHER :						
Misidentified	☐		Past Due	☐							

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04731

SHEET 1 OF 2

DWG NO. 646.4000

REV: A

PREPARED
BY

J. SOTO

DATE: 11/04/2014

EFFECT ON DWG
☒ INC. ☐ UNINC.

DWG TITLE: AS350 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.

SEAL COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 138354 MCT
15-10-29

76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N/TC	PART NUMBER	.4003	.4001				
		QTY			DESCRIPTION	MATERIAL	SPECIFICATION

DOCUMENTS EFFECTED:

☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM

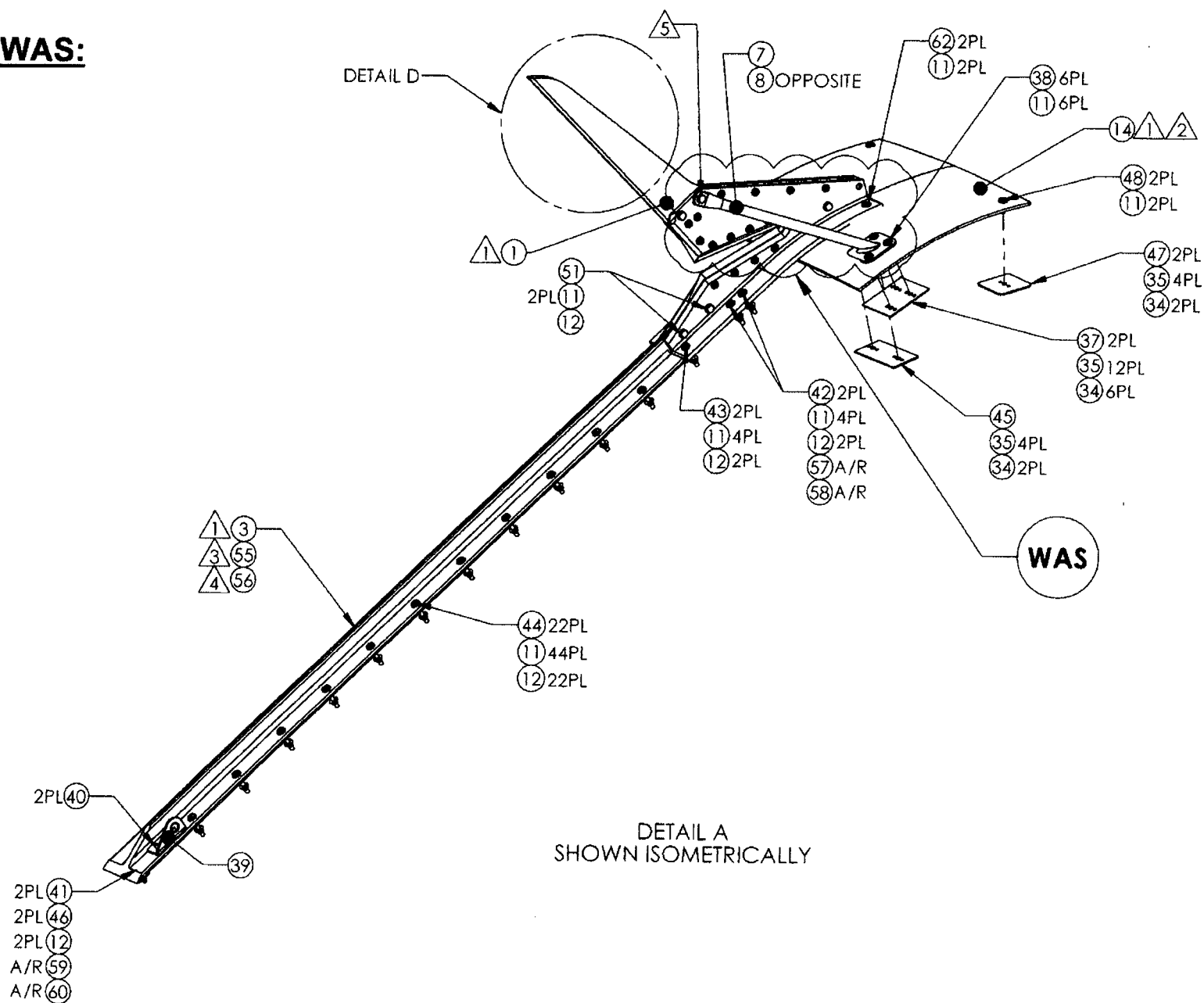
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

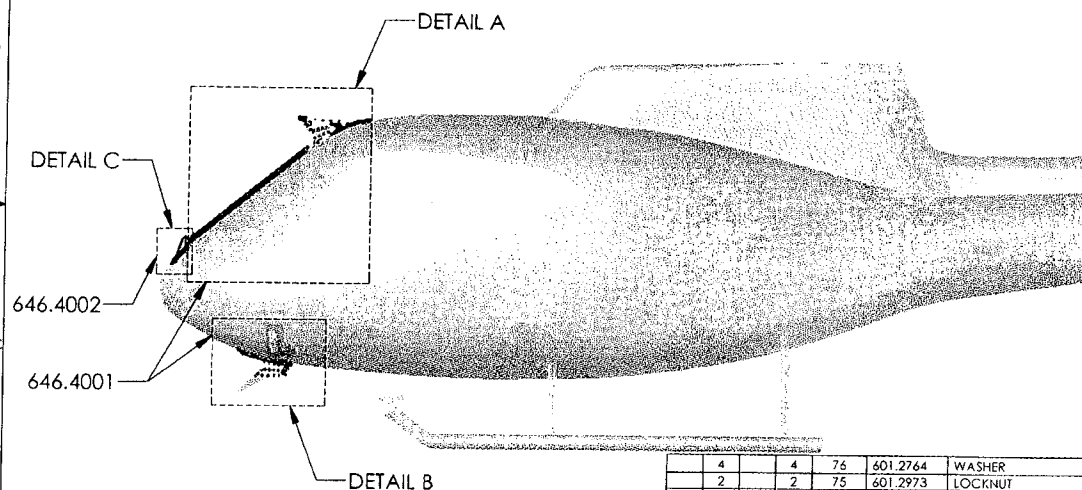
☐ YES ☒ NO

SHEET 2 WAS:



NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR : MCMMASTER-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1

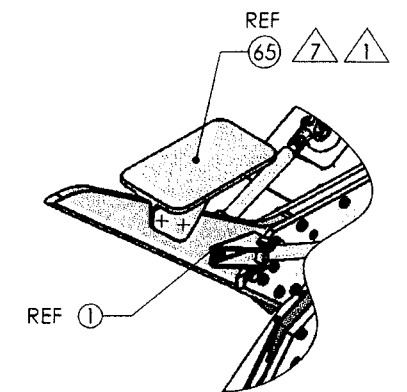


	4	4	76	601.2764	WASHER	NAST149F8K32 P		
	2	2	75	601.2973	LOCKNUT	M521042-08		
	2	2	74	601.2988	SCREW	M52703P-0B13		
	2	2	73	601.2943	LOCKNUT	M521042-3		
	2	2	72	601.3128	NUT	A2N316C4R		
	2	2	71	601.3209	LOCKNUT	M521042L4		
	4	4	70	601.2638	WASHER	NAST149F0K32 P		
	2	2	69	601.2669	BOLT	AN4C7A		
	2	2	68	601.3119	EYE BOLT	A2N6S-34R		
	2	2	67	601.3121	EYE BOLT	AN4A-5A		
	2	2	66	650.9201	EYE BRACKET ASSY			
REF	REF	REF	65	647.5701	GPS MOUNT KIT	△ NAS149F0303P		
	6	2	64	601.3151	WASHER	NAST149F0303P		
			63	601.2911	SCREW	M521042H4E53		
	2	2	62	601.2637	SCREW	M52703P-1-16		
	2	2	61	601.2763	BOLT	AHG-12A		
	1	1	60	646.3913	SHIM			
	4	4	59	646.3912	SHIM			
	1	1	58	646.3911	SHIM			
	4	4	57	646.3910	SHIM			
	5	5	56	600.1013	PRIMER			
-4004	-4003	-4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC

		REV.		DESCRIPTION		DATE	APPROVED
A		INCORPORATED ECHS 02199 02331 02719 & 02745				02/08/2010	P BRAVO
B		INCORPORATED ECH 03046 03079 & 04731				11/04/2014	P BRAVO

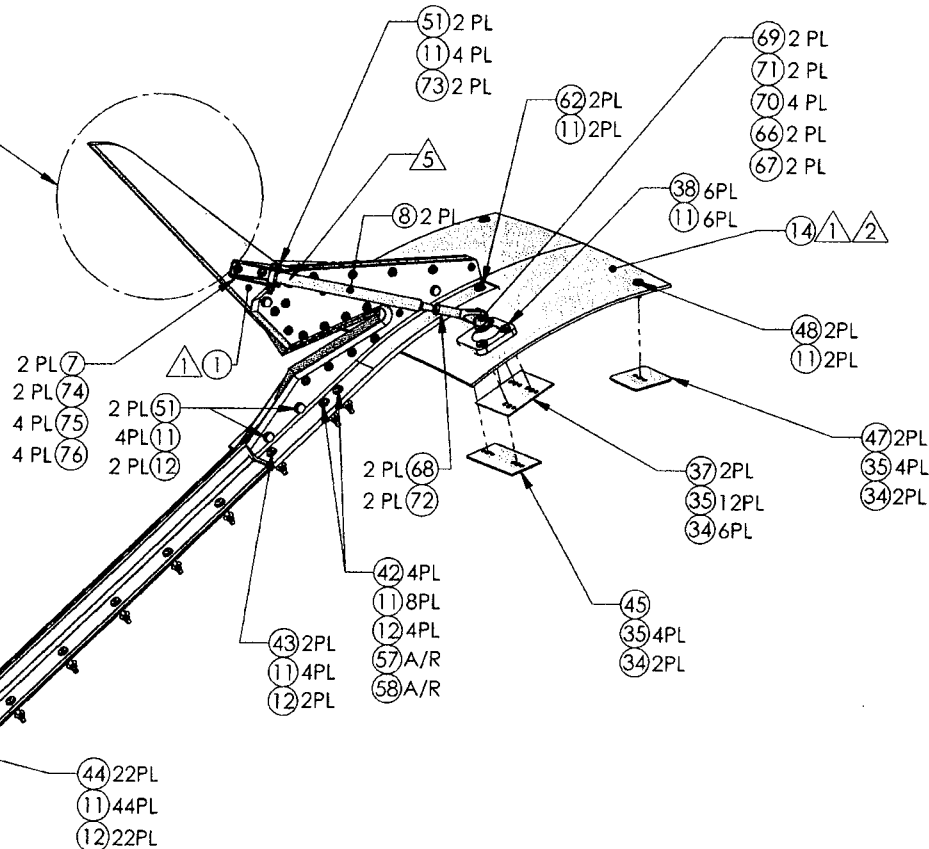
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THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.



DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

DETAIL D

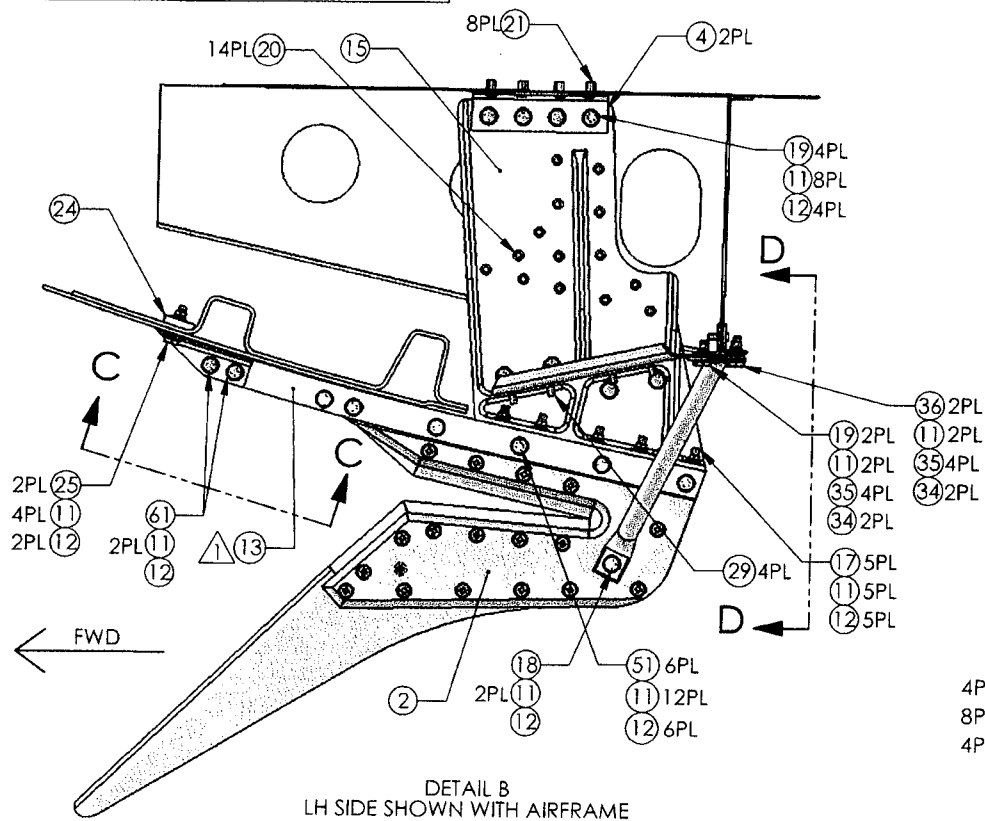


DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE 10/01/08		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CHECKED BY P. BRAYO		AS350 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAYO		SCALE: NONE	
CONTRACT NO.		SHEET 2 OF 4	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV. B	646.4000

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



DETAIL B
LH SIDE SHOWN WITH AIRFRAME

SECTION D-D
CUTTER HIDDEN FOR CLARITY

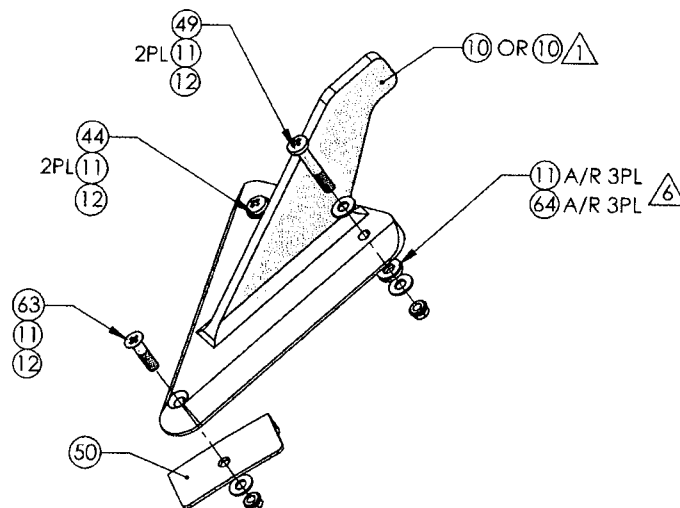
SECTION E-E

SECTION C-C

ORIGINAL DATE 10-04-91		08-27-08	
DRAWN BY S. HERR		CHECKED P. BRAVO	
DRAWING APPROVAL P. BRAVO		CONTRACTING	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SHEET 8	REV 8
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300		DWG. NO. 07M26 646.4000	
AS350 CABLE CUTTERS KIT		SCALE NONE	
		SHEET 3 OF 4	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE 10-04-07 08-27-08		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3312 (760)724-5300	
CHECKED BY P. BRAVO		AS350 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRAVO 08-27-08		SCALE NONE	
CONTRACT NO.		SHEET 4 OF 4	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		REV B 07M26	DWG. NO. 646.4000

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 04731				SHEET 1 OF 2	
	DWG NO. 646.4000	REV: A	PREPARED BY J. SOTO	DATE: 11/04/2014		EFFECT ON DWG ☒ INC. ☐ UNINC.
	DWG TITLE: AS350 CABLE CUTTERS KIT					
	APPROVED BY: ENGR <i>T. Brava</i>	MFG <i>David Baker</i>	QC <i>[Signature]</i>	EFF. NEXT ORDER		
TRANSACTION CODES (TC): A-ADD R-REVISE C-CREATE D-DELETE	REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.					

BAS
 27
 9-89

REFERENCE ONLY

76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N	TC	PART NUMBER	.4003	.4001			
			QTY		DESCRIPTION	MATERIAL	SPECIFICATION

DOCUMENTS EFFECTED:	☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM	CHANGE CATEGORY	DER REVIEW REQUIRED
		☐ MAJOR ☒ MINOR	☐ YES ☒ NO